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09/597,960	06/20/2000	D. Amnon Silverstein	10992107-1	5916

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EXAMINER	
SAID, MANSOUR M	
ART UNIT	PAPER NUMBER
2673	14

DATE MAILED: 08/30/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/597,960	SILVERSTEIN, D. AMNON	
	Examiner	Art Unit	
	MANSOUR M SAID	2673	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *6/14/04*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-3,5-7 and 9-19* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-3,5-7 and 9-19* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some.* c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Response to Amendment

1. This Office Action is in respond to the reconsideration filed on 6/14, 2004.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. Claims 1, and 9-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wang (6,580,420 B1) in view of Toda (6,496,179 B1).

As to claim 1, Wang teaches a computer mouse (input device, (mouse, (figure 1, (100) and (column 6, lines 53-55) comprising a motion sensor (column 4, lines 9-22) and a collapsible housing for the motion sensor (column 7, lines 14-25 and column 9, lines 25-34).

Wang does not disclose that a mouse is sized to fit within a PCMCIA slot.

However, Toda teaches a mouse (a lightweight thin mouse (figure 4 and column 2, lines 33-39)), because of its small thickness, Toda's input device would obviously fit into a PCMCIA slot (column 1, lines 17-23; column 2, lines 1-6 and column 2, lines 33-39).

Therefore, it would have been obvious to one ordinary skill in the art at the time the invention was made to incorporate Toda's thin lightweight mouse into Wang's collapsible mouse so as to provide a moving position detector suitably for a use as computer mouse that is lightweight in construction and relatively thin (column 2, lines 35-39).

As to claim 9, Wang teaches a retractable cable (cable, figure 28, (2854)) assembly within the housing (column 12, lines 52-59).

As to claim 10, Wang teaches) teaches a transmitter within the housing (column 13, lines 50-58).

4. Claims 2-3, 5-6, and 12-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wang in view of Hiegel (6,040,420 B1).

As to claim 5, Wang teaches a computer mouse (input device, (mouse, (figure 1, (100) and (column 6, lines 53-55) comprising a motion sensor (column 4, lines 9-22) and a collapsible housing for the motion sensor (column 7, lines 14-25 and column 9, lines 25-34).

Wang does not disclose a rigid base and an upper portion attached to the base, the upper portion made of an elastic material.

However, Hiegel teaches a rigid base (bottom part of edges, (figures 1-2. (20)) (column 3, lines 6-10) and an upper portion (cover, (figures 1-2, (10)) attached to the base (bottom part of edges, (figures 1-2. (20)) (column 2, lines 60-67 and (column 3, lines 6-10), the upper portion (cover, (figures 1-2, (10)) made of an elastic material (column 2, lines 60-67).

Therefore, it would have been obvious to one ordinary skill in the art at the time the invention was made to combine Hiegel's computer mouse having plastic housing into Wang's

system so as to have a protective and decorative cover for a computer mouse (column 1, lines 12-15).

As to claim 2, Wang teaches wherein the housing is collapsible into a relatively flat structure (figures 13-14); (column 10, lines 34-50).).

As to claim 3, Wang teaches wherein the motion sensor includes an optical sensor (column 13, 16-21).

As to claim 6, Wang teaches a computer mouse (input device, (mouse, (figure 1, (100) and (column 6, lines 53-55) comprising a motion sensor (column 4, lines 9-22) and a collapsible housing for the motion sensor (column 7, lines 14-25 and column 9, lines 25-34) and fold lines (figures see 25-26).

Wang does not disclose a rigid base and an upper portion attached to the base, the upper portion made of an elastic material.

However, Hiegel teaches a rigid base (bottom part of edges, (figures 1-2. (20)) (column 3, lines 6-10) and an upper portion (cover, (figures 1-2, (10)) attached to the base (bottom part of edges, (figures 1-2. (20)) (Column 2, lines 60-67 and (column 3, lines 6-10), the upper portion (cover, (figures 1-2, (10)) made of an elastic material (column 2, lines 60-67).

Therefore, it would have been obvious to one ordinary skill in the art at the time the invention was made to combine Hiegel's computer mouse having plastic housing into Wang's system so as to have a protective and decorative cover for a computer mouse (column 1, lines 12-15).

As to claim 7, Wang teaches a computer mouse (input device, (mouse, (figure 1, (100) and (column 6, lines 53-55) comprising a motion sensor (column 4, lines 9-22) and a collapsible housing for the motion sensor (column 7, lines 14-25 and column 9, lines 25-34).

Wang does not disclose a rigid base and an upper portion attached to the base, the upper portion made of an elastic material.

However, Hiegel teaches a rigid base (bottom part of edges, (figures 1-2. (20)) (column 3, lines 6-10) and an upper portion (cover, (figures 1-2, (10)) attached to the base (bottom part of edges, (figures 1-2. (20)) (column 2, lines 60-67 and (column 3, lines 6-10), the upper portion (cover, (figures 1-2, (10)) made of an elastic material (column 2, lines 60-67).

Therefore, it would have been obvious to one ordinary skill in the art at the time the invention was made to combine Hiegel's computer mouse having plastic housing into Wang's system so as to have a protective and decorative cover for a computer mouse (column 1, lines 12-15).

As to claim 12, Wang teaches wherein the housing has a deflectable mouse button (figures 26 & 28, (108)) area (column 13, lines 1-15); and wherein the mouse further comprising at least one sensor for detecting when the area is deflected (column 13, lines 16-33); whereby deflecting the area corresponds to clicking a mouse button (figures 26 & 28, (108)) (column 13, lines 1-15);

As to claim 13, Wang teaches that a sensor within the housing, the sensor detecting housing (device, (figure 1, (100)) volume changes that corresponds to mouse clicks (figures 1, 26 & 28, (108)) (column 8, lines 59-67 and column 9, lines 25-35).

5. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Wang in view of Toda as applied to claim 1 above, and further in view of Marchant (6,240,183 B1).

Wang and Toda teach all claimed limitations in claim except that a PCMCIA connector mounted to the housing.

Marchant teaches a PCMCIA (PCMCIA SLOT, (figure 3, (112)) connector mounted to the housing (computer, (figure 3, (102)) (column 5, lines 15-20 and column 5, lines 35-37).

Therefore, it would have been obvious to one ordinary skill in the art at the time the invention was made to incorporate Marchant's device having a PCMCIA into Wang's modified system so as to increase the versatility of the device.

6. Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Wang in view of Hiegel applied to claim 6, and further in view of Smith (6,055,592).

Wang and Hiegel teach all claimed limitation in claim 14 except that a sensor within the housing for detecting when the strip is bent.

However, Smith (figure 1 and 2) teaches click mouse button (102, and a sensor (position sensor, (224)) for detecting when the strip (mouse click area) is bent (column 3, lines 30-67).

Therefore, it would have been obvious to one ordinary skill in the art at the time the invention was made to utilize smith's input device having a sensor to detect when the strip is bent into Wang's modified system so as to increase the use of the input device.

7. Claims 15 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wang in view of Lee (6,392,632 B1).

As to claim 15, Wang teaches a computer mouse (input device, (mouse, (figure 1, (100) and (column 6, lines 53-55) comprising a motion sensor (column 4, lines 9-22) and a collapsible housing for the motion sensor (column 7, lines 14-25 and column 9, lines 25-34).

Wang does not expressly teach a sensor chip, and a stowed position and a deployed position.

However, Lee a sensor chip (column 1, lines 34-40), a stowed position and a deployed position (which is considered the calculating the movement, (column 1, lines 1, 34-41).

Therefore, it would have been obvious to one ordinary skill in the art at the time the invention was made to combine Lee's teaching an input device having a sensor chip into Wang's system so as to read the reflected image (column 1, lines 39-40).

As to claim 19, Wang teaches a computer mouse (input device, (mouse, (figure 1, (100) and (column 6, lines 53-55) comprising a motion sensor (column 4, lines 9-22).

Wang does not expressly teach a sensor chip.

However, Lee a sensor chip (column 1, lines 34-40).

Therefore, it would have been obvious to one ordinary skill in the art at the time the invention was made to combine Lee's teaching an input device having a sensor chip into Wang's system so as to read the reflected image (column 1, lines 39-40).

8. Claims 16 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wang in view of Toda as applied to claim 1 above, and further in view of Marchant (6,240,183 B1).

As to claim 16, Wang teaches a computer mouse (input device, (mouse, (figure 1, (100) and (column 6, lines 53-55) comprising a motion sensor (column 4, lines 9-22) and a collapsible housing for the motion sensor (column 7, lines 14-25 and column 9, lines 25-34).

Wang does not disclose a PCMCIA card for communicating with the mouse.

Marchant teaches a PCMCIA card for communicating with the mouse (column 5, lines 15-37).

Therefore, it would have been obvious to one ordinary skill in the art at the time the invention was made to incorporate Marchant's device having a PCMCIA into Wang's modified system so as to increase the versatility of the device.

As to claim 18, Marchant teaches a first a PCMCIA slot (figure 3, (112) (column 5, lines 15-20 and column 5, lines 35-37).

Marchant does not expressly disclose the second PCMCIA slot.

However, it is a design choice to have a second PCMCIA slot, since it has not stated the advantage of the second PCMCIA slot in the claim In re Rose, 105 USPQ 237 (CCPA 1955).

Therefore, it would have been obvious to one ordinary skill in the art at the time the invention was made to incorporate Marchant's device having a PCMCIA into Wang's modified system so as to increase the versatility of the device.

9. Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over Wang in view of Toda as applied to claim 16 above, and further in view of Karidis et al. (6,362,440 B1; hereinafter referred to as Karidis).

Wang and Toda disclose all claimed limitations in claim 17 except that a flat battery within the housing (column 7, lines 5-16; column 8, lines 1-12).

However, Karidis disclose a laptop computer comprising a flat batteries (column 7, lines 5-16 and column 8, lines 1-12).

Therefore, it would have been obvious to one ordinary skill in the art at the time the invention was made to combine Karidis's portable computer device having a flat battery into Wang's modified system so as allow the profile of the unit to be desirably reduced (column 8, lines 5-9).

Response to Arguments

10. Applicant's arguments filed on 6/14/04 have been fully considered but they are not persuasive. On page 2, Applicant argued, "Wang does not teach or suggest a housing that can be collapsed to fit within a PCMCIA Slot.

Examiner respectfully disagrees, Wang fairly teaches a housing that can be collapsed (column 9, lines 29-34).

However, Toda's teaches a very thin lightweight housing input device (figure 4 and (column 1, lines 17-23, column 2, lines 1-6 and column 2, 33-39). Because of its small thickness, Toda's input device would obviously fit into a PCMCIA slot.

On page 3, Applicant argued, "Toda says nothing about the mouse being collapsible".

Examiner agreed with the Applicant that Toda failed to disclose the collapsible input device, however, Examiner used the primary reference (Wang) to disclose such claimed limitation (collapsible input device) (column 9, lines 29-34).

On page 3, Applicant argued that the combined teachings of Wang and Toda do not produce a mouse having all of the limitations recited in claim 1.

Examiner respectfully disagrees, the combination of Wang and Toda fairly teach the broad claimed limitations of claim 1 as described above.

On page 3, Applicant argued that Toda does not suggest collapsing a mouse for storage.

However, Examiner respectfully disagrees for the following reasons, for example, "collapsing a mouse for storage" is not in the claim 1, however, the claimed limitation, such "a mouse size to fit within a PCMCIA sot" fairly taught by Toda's lightweight thin mouse, which could fit into a PCMCIA sot.

On page 4, Applicant argued that Wang does not teach or suggest a housing having a rigid base and an elastic upper portion attached to the base.

However, Examiner cited Hiegel's mouse, which disclosed a rigid base and an elastic upper body as described above, and the combination of Wang and Hiegel fairly disclosed the claimed limitations as disclosed in the claim.

On page 4, Applicant argued, Hiegel's protective cover 90 does not have fold lines.

However, Examiner respectfully disagrees, the input device of Wang fairly teaches including fold lines on the housing, which is disclosed on figures 25-26, and Hiegel's clearly shows a protective cover, such as, the upper portion (cover, (figures 1-2, (10)) made of an elastic material (column 2, lines 60-67).

On page 5, Applicant argued that Wang does not disclose a stowed position for his pointing device.

However, Examiner respectfully disagrees for the following reasons, Lee fairly teaches a stowed position and a deployed position (which is considered, as calculating the movement) (column 1, and lines 1, 34-41).

On pages 5-6, Applicant argued that the combination of Wang, Toda and Marchant do not disclose the claimed limitation, such as a PCMCIA card for communicating with a mouse.

Examiner respectfully disagrees, "Applicant admitted that on figure 3 of Marchant shows a mouse (106) that is connected to a security unit (52a)", and on column 5, lines 34-37, Marchant disclosed that "security unit is present upon a PCMCIA card that is inserted into PCMCIA slot of the computer, which shows the connection between a mouse and a PCMCIA slot (column 5, lines 18-37).

Conclusion

11. **THIS OFFICE ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Mansour M. Said** whose telephone number is **(703) 306-5411**.

The examiner can normally be reached on Monday through Thursday from 8:30 a.m. to 6:00 p.m. The examiner can also be reached on alternate Friday from 8:30 a.m. to 5:00 p.m. EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **Shalwala Bipin**, can be reached at **(703) 305-4938**.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C. 20231

or faxed to:

(703) 872-9314 (for Technology Center 2600 only)

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA, Sixth Floor (Receptionist)

13. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer service Office whose telephone number is (703) 306-0377.

August 12, 2004

Mansour M. Said

BIPIN SHALWALA
SUPV PATENT EXAMINER
TECHNOLOGY CENTER 2600